

## CLAIMS

I claim:

- 1        1. A wind powered charging system for batteries in a water  
2 vehicle, comprising:  
3        a cowling adapted for attachment to an external surface of  
4 said water vehicle;  
5        said cowling having a front input port for incoming air and  
6 a rear output port for outgoing air;  
7        a mounting plate providing a means for attaching said  
8 cowling to said external surface of said water vehicle;  
9        a fan blade adapted for attachment to an alternator;  
10       said alternator and fan blade adapted for attachment to said  
11 plate within said cowling; and  
12       a front of said fan blade facing said input port;  
13       wherein when air enters said input port and exits through  
14 said output port said fan will turn and said fan will turn said  
15 alternator which will generate electric current to charge said  
16 batteries.
- 1       2. The wind powered charging system for batteries in a water  
2 vehicle according to claim 1, wherein said cowling is attached to  
3 an outboard motor disposed on said water vehicle.

1        3. The wind powered charging system for batteries in a water  
2 vehicle according to claim 1, wherein said alternator is connected  
3 to said batteries by a cable.

1        4. The wind powered charging system for batteries in a water  
2 vehicle according to claim 1, wherein said mounting plate is  
3 selected from the group consisting of single piece plates for  
4 mounting to flat motor covers and multi piece plates for mounting  
5 to motor covers having a center ridge.

1        5. The wind powered charging system for batteries in a water  
2 vehicle according to claim 1, wherein said cowling comprises a top  
3 portion that decreases in height from said front input port to  
4 said rear output port of said cowling so that said input port is  
5 larger than said output port.

1        6. The wind powered charging system for batteries in a water  
2 vehicle according to claim 1, wherein said mounting plate  
3 comprises a shape that decreases in size from front to back and is  
4 equivalent to the bottom surface of said cowling.

1        7. The wind powered charging system for batteries in a water  
2 vehicle according to claim 1, wherein said front input port faces  
3 in the direction of the wind and said rear output port exhausts

4 air out of the rear of said cowling.

1 8. The wind powered charging system for batteries in a water  
2 vehicle according to claim 1, wherein said fan blade is mounted to  
3 an alternator shaft that extends from said alternator, wherein  
4 said fan blade directly drives said alternator.

1 9. The wind powered charging system for batteries in a water  
2 vehicle according to claim 1, wherein said fan blade and said  
3 alternator are attached to said mounting plate by a mounting  
4 bracket which is directly bolted to said mounting plate, wherein  
5 said alternator is secured to said mounting bracket by a bushing  
6 and an alternator housing.

1 10. The wind powered charging system for batteries in a  
2 water vehicle according to claim 1, wherein said fan blade is  
3 positioned directly in the center of said front input port of said  
4 cowling.

1 11. The wind powered charging system for batteries in a  
2 water vehicle according to claim 1, wherein said cowling further  
3 comprises a flat outer mounting portion having a plurality of bolt  
4 holes for mounting said cowling to said mounting plate.

1       12.   The wind powered charging system for batteries in a  
2 water vehicle according to claim 1, further comprising a screen  
3 covering the front input port of said cowling to protect said fan  
4 blade.

1       13.   The wind powered charging system for batteries in a  
2 water vehicle according to claim 1, wherein said cowling is made  
3 from a material selected from the group consisting of fiberglass  
4 and extruded plastic.

1       14.   The wind powered charging system for batteries in a  
2 water vehicle according to claim 1, wherein said alternator is a  
3 74 amp one wire, self energizing alternator that is adapted to  
4 charge three or less batteries at one time.